

"Gestalt studies of perception and intelligence are of this kind. However, this model raises objections from biology: homeostasis does not, in fact, involve exact balances, but is frequently overbalanced because of protective and cautious responses to intrusion."

-SIX PSYCHOLOGICAL STUDIES
(Piaget 1968:108)

41. FISH AND HONEYCOMB

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INTRODUCTION:

These two terms, homeostasis and equilibrium, are commonly used to describe two chemical processes that occur during mortality. They also have application to the Plan of Salvation, in particular to the process of judging. The process of homeostasis is characterized by at least two forces or actions that are active and constantly opposing or interacting with each other in such a way that they are balanced. They are dynamic and constant forces, but they are balanced so there is an appearance of equilibrium. They are not, however, in true equilibrium: they are balanced because they are actually on-going, something that is not possible with a system in a true state of equilibrium.^{1}

ORNAMENTAL WATERFALL:

An example of this type of system might be an ornamental garden water display which has a series of tiny water falls, a small pool and a quantity of water with a pump to circulate the water through the piping system. When there is an equality of forces, i.e. the cascading of water due to gravity equals the amount of water being pumped to the top of the system by the pump, the falls flow constantly and regularly. There is no evidence of bursts of water at some points and decreases at others. When this 'balance' exists, there is a state of homeostasis because the two forces, gravity pulling down and the pump pushing up, are balanced in relationship to each other. Note, however, that there actually is an imbalance in the system. Gravity is constantly pulling water down and the pump is constantly pushing water up. The two forces are constantly and actively opposing each other although there is no evidence of the two forces opposing each other. This is homeostasis.

On the other hand, equilibrium is considerably different. There is a temptation perhaps to describe the garden waterfall as an equilibrium of forces, but that isn't strictly accurate. This is because the two forces are actively competing and neither is overcome or neutralized by the other, although there is some sort of equality between them. Equilibrium would only exist, according to this definition, when the height of the column of water was

¹A fascinating correlation in neurology/psychiatry was discussed by Oliver Sacks (1985:114). In discussing a pathology resulting from right hemisphere dysfunction, termed Kosakov's Syndrome, he notes:

"For it is not memory which is the final, 'existential' casualty here (although his memory is wholly devastated); it is not memory only which has been so altered in him, but some ultimate capacity for feeling which is gone, and this is the sense in which he is 'desouled'.

"Luria speaks of such indifference as 'equalization' -- and sometimes seems to see it as the ultimate pathology, the final destroyer of any world, any self. It exerted, I think, a horrified fascination on him, as well as constituting an ultimate therapeutic challenge.

Sacks uses Luria's term 'equalization' in the sense we are using the term equilibrium here. And he notes that it is perhaps the ultimate pathology. The sense is the same: death.

sufficiently great that the pump would not be able to move water even when it was operating. There would be true equilibrium then because the forces would be balanced and not actively causing anything to happen.

Another example would be the functioning of cells in a living body. At all times, there are forces moving substances into the cells through various transport mechanisms. Energy is being consumed and the cells are able to live because there is constant replenishment of the enzymes, hormones, and nutrients required for their function.^{2} However, note that in this sort of system, while there is an apparent balance between all forces, the system is a dynamic one with constant movement and flows of molecules. Active transport occurs where ions are pumped across cell membranes against a particular gradient, a process that obviously consumes energy, else it wouldn't work. Or glucose molecules attach to insulin molecules which then miraculously pull the glucose through cell membranes. This small miracle actually keeps us alive because metabolism would cease otherwise. Glucose molecules are otherwise too large to traverse the complex, three-layer cell membranes without the transport assistance of insulin molecules. And the imbalance of forces is actually used in remarkably complex manners in some cases, as in the counter-current mechanisms in kidneys or in the noses of kangaroo rats or the gills of salt water fish.

BALANCE OF FORCES = DEATH:

But when a body dies, the opposition of forces in the cells is neutralized because the various ionic concentrations, etc. are actually allowed to reach a state of true equilibrium where they are truly balanced. Cell walls rupture and blend their contents with extracellular, interstitial fluids. Extracellular potassium jumps from 4.5 meq to the 100+ that would result from blending of intra-and extra-cellular contents. So it becomes apparent, then, that a state of equilibrium is actually the condition of death where things are balanced.

Now to apply this to the spirit body and the mortal body. The mortal body is characterized by the process of homeostasis while it is alive, and only reaches equilibrium in death when it disintegrates. We cannot guess at whether these terms are even applicable to the spirit body.

FISH AND HONEYCOMB:

²As an example of the extraordinary things going on in the mortal body under these conditions of homeostasis shows up in Guyton's description of the physiology of erythrocytes [red blood cells]. He claims that due to the permeability of the cell membranes and the gradient between serum and intracellular osmotic values that there is an extraordinary rate of water passage through these tiny cells. He claims that the rate is so high the volume passing through each minutes is 90 times the actual volume of the cell itself! (If you don't believe this, and I find it implausible myself, just look it up!) So we have homeostasis -not equilibrium- in the vascular space but incredible things are going on anyway.

A fascinating note to bring in now: after His resurrection, Christ, according to the testimony of some present at the time, did partake of fish and honeycomb. In fact, he appears to have done it on purpose just to make a point about the reality or solidity of His body. This was a resurrected body. He ate mortal stuff, so what does that mean? I don't know. But it certainly is suggestive. Does a resurrected body actually need sustenance? That would be totally unexpected to me. But if he ate it, what happened to the stuff? Was it metabolized and excreted in some manner, or is it still in His body today? And if he metabolized it, (a) how can a perfected body do that at all and (b) how can an entity from another dimensioned reality ingest the food of this world? Or was it slight of hand wherein He really didn't eat it at all, rather stuffed it in a pocket but gave the appearance of eating it? I doubt the latter because deception, even the garden variety that constitutes magic, is absolutely out of His range. He will never do anything that even has the possible appearance of deception, and therefore dishonesty, about it.

CONCLUSION:

So homeostasis and equilibrium, characteristics of this world, may or may not have application to the spirit or resurrected body. A test example would be Christ's ingestion of food which implies "digestion" -and comparable physiological processes. A mortal body consists of various organ systems that process the food, circulate it, metabolize it and excrete it. Does that occur in a spirit body? If it is perfected, I suspect that most of us will believe that it doesn't need nutrients. And that if it doesn't, that it likely won't need -or even contain- the organ systems just referred to. Energy is the form mortal bodies require it is probably not needed by the perfected body. How could a perfected body even process the stuff of this 3-D world? We don't know, but eating mortal stuff raises the question.